

Notice of Allowability**Application No.**

09/978,248

Examiner

Malgorzata A. Walicka

Applicant(s)

HOLLAND ET AL.

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1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/08/2004.
2. ☒ The allowed claim(s) is/are 29-34,38-42,44 and 45.
3. ☒ The drawings filed on 16 October 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>10/07/02</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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The Amendment under 37 CFR 1.121 and Declaration under 37 CFR 1.131 both filed June 08, 2004, are acknowledged. The amendments to claims have been entered as requested. Claims 1-17 and 20 are canceled. Claims 29, 40, 42 and 43 are presently amended. Claims 18-19 and 21-45 are pending. Claims 8-19, 21-28 and 30-34 are withdrawn from the examiner's consideration as directed to the non-elected invention. Claims 29 and 35-45 are the subject of this Office Action.

DETAILED ACTION

1. Election/Restriction

Rejoinder

Claim 29 and 35-45 (elected Group I) are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claim 30-31 (Group IV) and claim 32-34 (Group V) directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, are now subject to being rejoined. Process claim 30-34 are hereby rejoined and fully examined for patentability under 37 CFR 1.104.

2. Objections

The objections to claim 20 and 40 made in the Office Action of Dec. 10, 2003 are withdrawn, because the claims have been amended.

3. Rejections

3.1. 35 USC, section 112, first paragraph

Rejection of claim 40 and 43 made in the previous Office Action is withdrawn, because the claims have been amended.

3.2. 35 USC, section 112, first paragraph

Rejection of claims 29, 42 and 43 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement made in the Office Action of Dec. 10, 2003 is withdrawn, because Applicants' arguments regarding the fragment of GID that binds GNK and its substrate are found persuasive.

2.2. 35 USC section 102

In the Office Action of Dec. 10, 2004 claim 20, 29, 35-42 and 44 were rejected under 35 U.S.C. 102(e) as being anticipated by the WO document WO200153312-A1 issued on 26 July 2001 with priority to the US application No 09/620,312 filed on July 19. Rejection of claim 20 is moot, because the claim has been canceled. Rejection of claims 29, 35-42 and 44 is withdrawn in the light of Declaration under 37 CFR 1.131.

2.3. 35 USC section 103

Rejection of claim 45 under 35 U.S.C. 103(a) made in the previous Office Action is withdrawn, because the WO document WO200153312-A1 is not the prior art in the light of the Declaration under 37 CFR 1.131.

3. Examiner's amendment

- (1) Please cancel claims 8-19, 21-28, 35, 36, 37 and 43.
- (2) Please change claims 29, 44, and 45 to depend on claim 38.
- (3) Please change claim 32 to depend on claim 39.
- (4) Please amend claim 40 to read:

Claim 40: An isolated polypeptide having a decarboxylase activity, wherein said polypeptide is encoded by a nucleic acid selected from the group consisting of:

- (a) a nucleic acid comprising nucleotides 646 through [1183] 1185 of SEQ ID NO: 1;
- (b) a nucleic acid, wherein the T_m of a hybrid between said nucleic acid and that of a is greater than 65° C [capable of hybridizing to (a) under hybridization conditions comprising 40% formamide and 5xSSC]; and
- (c) a nucleic acid that, due to degeneracy of the genetic code, encodes a polypeptide encoded by (a) or (b).

Applicants' representative, Paul B. Tran, gave authorization for this amendment on July 7, 2004.

4. Allowance

Claims 29-34, 38-42 and 44-45 are allowed. The following is the examiner's reason for the allowance. Applicants disclose a novel human polypeptide, GNK interacting decarboxylase (GID) of SEQ ID NO: 2. The novel polypeptide is a partner to

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the GNK protein kinase and the GNK protein kinase substrate, sGNK. The novel peptide is also a substrate for caspase-3 *in vitro*. Applicants teach two methods of use of the new peptide. The first method is directed to isolation of GNK and its substrate and the second method is directed to detecting caspase-3. The newly disclosed decarboxylase is supposed to play a role in the regulation of vascularization development, because GNK protein kinase and its substrate are involved in the regulation of vascularizaion during embryonic development.

The invention is free of prior art and nonobvious. The closest prior art, the WO document WO200153312-A1 is not the prior art in the light of the Declaration under 37 CFR 1.131.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malgorzata A. Walicka, Ph.D., whose telephone number is (703) 305-7270. The examiner can normally be reached Monday-Friday from 10:00 a.m. to 4:30 p.m.

If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy, Ph.D. can be reached on (703) 308-3804. The fax phone number for this Group is (703) 305-3014.

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Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionists whose telephone number is (703) 308-0196.

Malgorzata A. Walicka, Ph.D.

Patent Examiner

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